

Who Should Manage Rio Grande Ecosystem Water?

Introduction: The critical overdevelopment of the waters of the Rio Grande has led to a decline in the river's ecosystem, emblemized by its endangered species crisis. Resolving this crisis may hinge upon the ability of water managers to provide a permanent pool of publicly held water, with rights and storage acquired to meet ecosystem stream flow requirements.

Such a "Program Water Pool" would be managed to meet several objectives:

- maintaining minimum streamflows in dry years and seasons (per the 2003 Biological Opinion or subsequent determinations of river needs);
- providing a seasonal flood pulse to trigger minnow spawning;
- reconnecting portions of the floodplain to the river channel;
- transporting sediments through the river system;
- offsetting depletions created by changes in physical habitat and water management made to benefit the species of concern and river ecosystem as a whole;

Additionally, the public water pool could help provide a "cushion" to the State of New Mexico in complying with water delivery requirements of the Rio Grande Compact.

Annual water deliveries to Elephant Butte Reservoir, totaling 400 to 800 kaf, have been relied upon provide the bulk of the water to meet the above purposes. However, during the high irrigation season (mid-June through October) river drying is a recurring condition in critical reaches of the Rio Grande. River drying has been addressed in the past by releasing "supplemental water" acquired through voluntary leases with Reclamation's San Juan Chama contractors. The Water Acquisition and Management Committee envisions meeting Program Water needs with annual lease/purchases of water from current users, its storage in upstream reservoirs, with flows released as needed to provide for the river's needs.

>>>Resolving the question of what institution(s) should manage the public water pool is important to WAM planning as the question of how much water is needed and what the source of that water will be. Water management responsibilities are presently divided among: local water providers, end users, state water rights administrators, federal reservoir authorities and the Rio Grande Compact Commission. Where should the ownership and management of an environmental water pool fit into this jurisdictional matrix?

Several models for managing Program water, outlined below, should be considered by Collaborative Program management. When it becomes apparent that the requisite water and storage will actually be secured, the most appropriate model will be selected.

Authorities: ESA is a **federal** law, mandating a federal nexus in management of the Rio Grande. The *US Fish and Wildlife Service* (Service) determines the needs of listed species and prescribes federal water management (and other) actions to meet them. *US Bureau of Reclamation* (Reclamation), in addition to maintaining certain water storage and delivery systems, provides necessary accounting for deliveries of water under the San Juan-Chama and Middle Rio Grande Projects. *US Army Corps of Engineers* (Corps) has major flood control jurisdiction, reservoir control, at Abiquiu and Cochiti..

The Program area lies entirely within the **State of New Mexico**, making the Program pool subject to state statute. The *New Mexico Interstate Stream Commission* (NMISC) is responsible for NM's compliance with Rio Grande, Colorado River and Upper Colorado River Compacts. The *New Mexico State Engineer* (NMOSE) is responsible for administration of permits to divert and use water in NM.

Two **local** political subdivisions control the preponderance of state water rights. The *Middle Rio Grande Conservancy District* (MRGCD) distributes water to irrigation end users within its service area. The *City of Albuquerque Public Works Division* (City) distributes potable water to residential and industrial water users within its boundaries.

Tribal lands and water must be adequately protected.

Decisions: A “decision matrix” for managing Program water would include a number of considerations.

- **Biological:** The momentary and seasonal ability of water naturally occurring flows to support the biology of the species of concern; prescriptions of the Service.
- **Water Rights Administration:** The rates of water diversions required by the Middle Rio Grande Pueblos, City and MRGCD; impacts of actions to end users; legal priority of Program water.
- **Forecasts:** real-time snowpack, streamflow and precipitation.
- **Reservoir Operations and Accounting:** The status of storage of San Juan-Chama and native water supplies; availability of unoccupied reservoir space; location of available storage; reservoir authorized purposes; flood operations prescriptions; status of New Mexico's annual and cumulative compliance with Rio Grande Compact deliveries and restrictions under Articles 6 and 7 of the RG Compact.
- Quantity and Location of Program water storage

Development of an **annual Rio Grande water budget** and a **design hydrograph** based upon it could assist the public water pool management entity in balancing the storage and release of Program water.

Some Possible Management Models:

1) Adaptive/Collaborative Models- Since 1996, Reclamation has secured supplemental water leases with its San Juan-Chama contractors for silvery minnow conservation, using Congressional appropriations. Because of this funding stream and the fact that its water management actions are subject of consultation over ESA compliance, the Bureau has naturally assumed the lead in managing “minnow water”. However, as time goes on, Reclamation authority might become less compelling, if water stored in reservoirs becomes less directly controlled by this agency¹. While, it is by no means clear that Reclamation will continue to exert ultimate authority over the Rio Grande, it is clear that it and its sister agencies (see “Authorities”,

¹ Abiquiu and Cochiti, potential storage locations for Program water, are Corps facilities; El Vado Reservoir might be returned to MRGCD control before 2014. Effective control of the San Juan Chama Project is also, arguably, subject to some process of transfer to local beneficiaries and a proposal to do so is currently being discussed (November, 2003).

above) will continue to exercise their mandates as the Program water pool is implemented. Collaborative management of supplemental water programs has worked in the past and, considering the range of stakeholders should continue in improved form throughout the life of the Collaborative Program (projected to FY 2014).

(A) As Directed by Reclamation: The current system of daily conference calls has assisted Reclamation in making daily decisions for operating the river system. These calls have included agency stakeholders (described in “Authorities”, above). This management scheme has worked reasonably well in the past, as short-term “water borrowing” and “last minute leases” were found necessary to meet stream flow prescriptions. By Reclamation’s continuing to assume final authority over ESA-related releases, there is some concern about the potential for Rio Grande decision-making to be increasingly arbitrated by national policy-makers, who may be too far removed from the complex of local management considerations to render locally acceptable decisions. (See “Command/Control” models, below).

Reclamation does have invaluable experience as manager of environmental water arrangements in other basins, has financed water acquisitions in the past. One advantage of continuing the present Reclamation-directed arrangement is that no further federal or state authorizations would be necessary.

(B) As Directed by NMISC: Western States, including New Mexico, have long grappled with limitations on their sovereignty over water resources, which has resulted from the sizeable federal role in water development. Successful negotiations conducted by NMISC with other Rio Grande Compact states in 2000 (Conservation Water Agreement) and 2003 (Emergency Drought Agreement) resulted in substantial pools of state-owned water for ESA compliance and an growing role for the State in ESA compliance

A draft Statewide Water Plan, which contains general policies for Active Water Resources Management, contains the suggestion that New Mexico consider acquiring pools of water for ESA compliance in the state’s five major river basins, all of which contain federally-listed species. Water banking proposals, including some for public purpose water, are virtually certain to be fully explored by the State Legislature before 2014. State ownership of Program water would not necessarily dictate its precedence over management of that water.

If the State were to create an arrangement to accommodate a Program water pool, it might be in a position to assume direct water management. Such an arrangement clearly has potential to enhance its Compact compliance. However, at this time, NMISC lacks an equivalent water management infrastructure to Reclamation’s and its mandates/incentives for species management are less compelling.

(C) Directed by the Collaborative Program: Acquisition of a permanent pool might provide management with an opportunity to create **operating criteria**, to more fully rationalize river operations and resolve potential conflicts over management decisions, in advance. Legislation authorizing the ESA Collaborative Program might create an enduring

management² entity consisting of all the relevant authorities³, whose access to decision-making power would have to be secured in any management model.

As an experiment in democratic watershed governance, a Collaborative Program water management scheme would be theoretically accessible to Pueblos, public interest non-governmental groups (such as the Rio Grande Alliance and Rio Grande Restoration) and associations of private water rights holders, which is not necessarily the case with the previous models. A river basin managed by and for the whole range of stakeholders aims at realizing equity and empowerment for all users, a goal that might be achieved through selection of this “fully collaborative” model.

For the Collaborative Program to assume ownership or management authority would require Congressional approval.

2. Command/Control Models- This is a characterization of the prevailing paradigm of governance when speed and finality are most desired. Command/Control requires an experienced decision-maker with access to good information to achieve quality decisions. Its weakness is that it is subject to the bias of the decision-maker and fails when critical information is not supplied, is incomplete or is selectively integrated by the decision-maker. The following models are not subject to selection by the Program, but may be imposed if certain conditions dictate.

(A) By State Engineer Water Master: New Mexico Statutes (NMSA 72-article 3)) provides that the State Engineer may create water districts and appoint a water master to govern the apportionment of water within that district. The draft Statewide Water Plan contains the suggestion that such mechanisms will be used more frequently in the future and could result in improved management in disputed basins. In fact, the State Engineer is in currently in process of creating at least one water master district and protestants to the City of Albuquerque Permit application (OSE #4830) have suggested this approach for administering the City Drinking Water Project. If a water master district were broadly drawn within the Program area, Program water supplies could be subject to this jurisdiction. Such a management scheme could conceivably assist in addressing the issue of protecting Program water.

(B) By Federal River Master: In the event that New Mexico begin to accrue a Compact debit, and Texas prevails in a US Supreme Court legal action, one option that will be available to the Court is appointment of a Federal River Master to correct long-term delivery shortfalls. Appointment of its own special master is how the Court chose to oversee its decree in *Texas v. New Mexico* on the Pecos River. {*Q: Has river master affected flows acquired for conservation of the Pecos bluntnose shiner?*}

(C) By Reclamation Discretion: Although the issue of preempting Reclamation project water supplies may receive definitive resolution by (recent or subsequent) actions of Congress, it is at least remotely possible that San Juan-Chama and/or Middle Rio Grande

² As presently conceived, it would be authorized for only 10 years.

³ (See “Authorities”, above.) Possible exceptions are the Rio Grande Pueblos, only one of which (Isleta Pueblo) has formally affiliated with the Program at this date.

project water supplies might be subject to expropriation, as suggested by US 10th Circuit Court of Appeals decision(s). It should be noted that the likelihood of such a taking can be greatly reduced if recommended Program water acquisition and management activities can be implemented by Spring, 1906.

Conclusions:

- Significant water acquisition measures should be in place prior to the 2006 irrigation season, to avoid adverse consequences to the listed species, water users and administrators, alike.
- The Collaborative Program should begin as soon as possible to negotiate and select an Adaptive/Collaborative Management entity, or process, for managing Program water.
- All parties should be involved, including regulatory authorities, Pueblos, water users and conservation groups.
- OSE permits for temporary transfers and for reservoir storage must be obtained. State management prerogatives are likely to expand.
- Ownership of Program water must be legally acquired and an owner, or trustee, must be determined. Reclamation or NMISC ownership should be considered; Collaborative Program ownership may also be explored.